



## PATENT ABSTRACTS OF JAPAN

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MASUI TAKATOSHI****(54) EXHAUST EMISSION CONTROL DEVICE FOR  
INTERNAL COMBUSTION ENGINE****(57) Abstract:**

**PROBLEM TO BE SOLVED:** To prepare a system capable of simply deciding NOX deterioration and HC deterioration of catalyst.

**SOLUTION:** A NOX catalyst 36 is provided on an exhaust pipe 31 of a diesel engine 1 and an entering gas NOX sensor 52 is provided at the upstream thereof. A going out gas NOX sensor 54 is provided at a downstream and a HC feeding device 40 for intermittently feeding a hydrocarbon(HC) to the exhaust pipe 31 is provided at the upstream of the entering gas NOX sensor 52. The entering gas NOX sensor 52 and the going out gas NOX sensor 54 are constituted by a NOX sensor utilizing an oxygen pump. This NOX sensor receives an interfering influence against intermittent feeding of HC and has an instantaneous output reduction characteristic. A HC deterioration of the NOX catalyst 36 is decided from an output variation of the entering gas NOX sensor 52 and the entering gas NOX sensor 54 at the time of HC intermittent feeding utilizing this

characteristic. A NOX deterioration of the NOX catalyst 36 is decided from the output of the entering gas NOX sensor 36.

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